

1. Identification of Substance/Mixture and the Company Undertaking

1.1 Product Identifier: SureAdditive Scavenger/ Disinfectant

1.2 Relevant identified uses of the substance or mixture and uses advised:
Water treatment

1.3 Details of the supplier of the safety data sheet:

ECA Water Systems, LLC
136 Bus Terminal Road
Oak Ridge, TN 37830

E-Mail Address: vndskk@gmail.com
US Telephone Number: +1 865-207-6545

1.4 Emergency Telephone Number: +1 865-207-6545

2. Hazards Identification

2.1 Classification of the Substance or Mixture:

CLP/GHS Classification:

Acute Inhalation Toxicity Category 2 (H310)
Skin Corrosion Category 1A (H314)
Eye Damage Category 1 (H318)
Specific Target Organ Toxicity Single Exposure Category 3 (H335)
Hazardous to the Aquatic Environment- Acute Hazard Category 1 (H400)
Hazardous to the Aquatic Environment- Chronic Hazard Category 1 (H410)

2.2 Label Elements

Danger!



Contains: Solid HOCL Blend

Hazard Phrases

H310 Fatal if inhaled
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Phrases

P260 Do not breathe dust.
P264 Wash thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area
P273 Avoid release to the environment.
P280 Wear protective gloves, eye protection and face protection
P284 In case of inadequate ventilation wear respiratory protection.
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P310 Immediately call a POISON CENTER or doctor.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin

with soap and water.
 P363 Wash contaminated clothing before reuse.
 P310 Immediately call a POISON CENTER or doctor.
 P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P310 Immediately call a POISON CENTER or doctor.
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER or doctor.
 P391 Collect spillage.
 P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.
 P501 Dispose of contents and container in accordance with local and national regulations.

2.3 Other Hazards:

EUH 031: Contact with acids liberate Toxic gas

3. Composition/Information on Ingredients

3.2 Mixtures:

Chemical Name	CAS-No. / EINECS-No	%	GHS Classification:
Solid HOCL Blend	Proprietary	>50	Ox. Sol. 2 (H272); Oral Tox. 4 (H302); Inhal. Tox. 2 (H330); Skin Cor.1A (H314); Eye Irrit. 2 (H319); STOT SE 3 (H335); Aqua. Acute Tox. 1 (H400); Aqua Chronic Tox. 1 (H410)
Sodium acid acetate	Proprietary	<20	Eye Dam 1 (H318)
Carbonic acid disodium salt	497-19-8 / 207-838-8	<20	Eye Irrit. 2 (H319)
Sodium Sulfate	7757-82-6 / 231-820-9	<10	Not Hazardous
Sodium Chloride	7647-14-5 / 231-598-3	<5	Not Hazardous

4. First Aid Measures

4.1 Description of First Aid Measures:

Inhalation: If symptoms of exposure develop, remove to fresh air. If breathing becomes difficult, administer oxygen. If breathing has stopped, administer artificial respiration. Get immediate medical attention.

Skin Contact: Wash thoroughly with water for 15 minutes. Seek immediate medical attention.

Eye Contact: Rinse cautiously with water for 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention.

Ingestion: Do NOT induce vomiting. If the victim is fully conscious, have them rinse mouth with water. Seek immediate medical attention. Never give anything by mouth to a person who is unconscious or drowsy.

4.2 Most Important symptoms and effects, both acute and delayed: Fatal if inhaled. Inhalation of dust may cause irritation of upper and lower airways, coughing, laryngospasm and edema, shortness of breath, bronchoconstriction, and possible pulmonary edema. The pulmonary edema may develop several hours after a severe acute exposure. Dermal exposures along with moisture may cause redness, irritation, burning sensation, swelling, blister formation, first, second, or third degree burns. Repeated and prolonged skin contact may cause a dermatitis. Causes serious eye damage. Exposure to eyes may cause irritation and burns to the eye lids, conjunctivitis, corneal edema, and corneal burn. Significant and prolonged contact may cause damage to the internal contents of the eye. Exposure by ingestion may cause irritation, nausea, and vomiting. May cause local tissue damage to esophagus and stomach such as burning, inflammation, local ulceration, and may cause gastrointestinal bleeding.

4.3 Indication of any immediate medical attention and special treatment needed: Immediate medical attention is required for all routes of exposure

Treat as a corrosive substance. This material is more irritating to the skin and eyes in the presence of water. For prolonged exposures and significant exposures, consider delayed injury to exposed tissues. There is no antidote. Cyanuric acid is readily removed from the body via the renal system, and is not bio-accumulated. Treatment is supportive care. Follow normal parameters for airway, breathing, and circulation.

5. Fire-Fighting Measures

5.1 Extinguishing Media: Flood with copious amounts of water. Do not use ABC fire extinguishers. Do not use dry chemicals, carbon dioxide, or halogenated extinguishing agents.

5.2 Special Hazards arising from the Substance or Mixture: If heated by outside source to temperatures above 240 °C (464 °F), this product will undergo decomposition with the evolution of noxious gases but no visible flame. When ignited will burn with the evolution of chlorine and equally toxic gases. Contaminated or wet product may act an oxidizer and intensify fire potential. Wet material may generate nitrogen trichloride, an explosion hazard.

5.3 Advice for Firefighters: Move container from fire area if it can be done without risk. Material which appears undamaged except for being damp on the outside, should be opened and inspected immediately. DO NOT attempt to reseal contaminated drums. Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored.

6. Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures: Isolate the area and keep unnecessary personnel away. Stay upwind and keep out of low areas. Wear appropriate protective clothing and equipment (see section 8). Prevent contact with skin, eyes and clothing. Do not breath dust or gas.

6.2 Environmental Precautions: Prevent entry in storm sewers and waterways. Report spill as required by local and national regulations.

6.3 Methods and Material for Containment and Cleaning Up: DO NOT add water to spilled material. DO NOT use floor sweeping compounds to clean up spills. Sweep and scoop spilled material into clean, dedicated equipment. Every attempt should be made to avoid mixing spilled material with other chemicals or debris when cleaning up. DO NOT attempt to reseal contaminated drums. DO NOT transport wet or damp material. Damp material should be neutralized to a non-oxidizing state. Contact manufacturer for instructions for handling and disposal of damp material.

6.4 Reference to Other Sections: Refer to Section 13 for disposal advice.

7. Handling and Storage

7.1 Precautions for Safe Handling: Prevent eye and skin contact. Do not breath dust or gas. Avoid creation of dust. Wash exposed skin thoroughly with soap and water after use. Wear appropriate protective clothing and equipment (see section 8). Do not eat, drink, or smoke when using this product.

NEVER add water to this product. Always add product to large quantities of water. Use clean, dry utensils. Do not add the product to any dispensing device containing residuals of other products. Read and follow product use instructions.

Do not reuse empty containers. Empty containers retain product residue and may be dangerous. Follow all SDS guidelines when handling empty containers.

7.2 Conditions for Safe Storage, Including any Incompatibilities: Store and handle in accordance with all current regulations and standards. (NFPA Oxidizer Class 1). Store in original container and in a dry area where temperatures do not exceed 52 °C (125 °F) for 24 hours. Do not allow water to get in container. If liner is present, tie after each use. Keep container tightly closed and properly labeled. Store locked up, away from incompatible materials: acids, ammonia, bases, floor sweeping compounds, calcium hypochlorite, reducing agents, and organic solvents and compounds.

7.3 Specific end use(s): Waste water treatment.

8. Exposure Controls / Personal Protection

Chemical Name	Exposure limit(s)
Solid HOCL Blend -United Kingdom -Germany -France -European Union	None established None established None established None established
Sodium acid acetate -United Kingdom -Germany -France -European Union	None established None established None established None established
Carbonic acid disodium salt -United Kingdom -Germany -France -European Union	None established None established None established None established
Sodium Sulfate -United Kingdom -Germany -France -European Union	None established None established None established None established
Sodium Chloride -United Kingdom -Germany -France -European Union	None established None established None established None established

Note: If not listed above, refer to local regulations for specific country exposure limits.

8.2 Exposure Controls:

Engineering Controls: Use only in well-ventilated areas. Provide local exhaust ventilation where dust may be generated. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Respiratory Protection: Wear an approved respirator (mask) with appropriate eye protection. A full face piece respirator provides both eye and respiratory protection. Selection of respiratory protection depends on the contaminant type, form and concentration. Select in accordance with all applicable regulations; and good Industrial Hygiene practice.

Hand Protection: Wear appropriate chemical resistant gloves.

Skin Protection: Wear protective clothing to minimize skin contact. When potential for contact with material exists, wear disposable coveralls suitable for dust exposure. Contaminated clothing should be removed and laundered before reuse.

Eye Protection: Wear chemical safety goggles.

9. Physical and Chemical Properties

9.1 Information on basic Physical and Chemical Properties

Appearance:	White, Compact solid and granular particles
Odor:	Slight chlorine

Odor Threshold:	Not determined
pH:	6.7 (When 1.72 grams is dissolved in 1 gallons of water)
Melting/Freezing Point:	Not applicable
Boiling Point:	Not applicable
Flash Point:	Not applicable
Evaporation Rate: (n-butylacetate =1)	Not applicable
% Volatile by Volume:	Not applicable
Lower Flammability Limit: Upper Flammability Limit:	Not applicable
Vapor Pressure:	Not applicable
Vapor Density(Air=1):	Not applicable
Solubility:	Soluble in water
Autoignition Temperature:	Not determined
Decomposition Temperature:	225-250°C (437-482°F)
Viscosity:	Not applicable
Explosive Properties:	Wet material may generate nitrogen trichloride, an explosion hazard.
Oxidizing Properties:	Oxidizing Solid
Specific Gravity (H₂O= 1):	1.59

10. Stability and Reactivity

10.1 Reactivity: Not reactive under normal temperatures and pressures.

10.2 Chemical Stability: Stable at normal temperatures and pressures.

10.3 Possibility of Hazardous Reactions: None expected.

10.4 Conditions to Avoid: Incompatible materials.

10.5 Incompatible Materials: Do not get water inside container. Wet material may generate nitrogen trichloride, an explosion hazard. Avoid contact with easily oxidizable organic material. Contact with acids liberates toxic gas.

10.6 Hazardous Decomposition Products: chlorine, nitrogen, nitrogen trichloride, cyanogen chloride, oxides of carbon, and phosgene.

11. Toxicological Information

11.1 Information on Toxicological Effects:

Potential Health Effects:

Acute Toxicity Values:

Product ATE: LD50 Oral 2025 mg/kg.
 LD50 Dermal >2000 mg/kg
 LC50 Inhalation 0.3 mg/L (Dust / mist)

Solid HOCL Blend:

LD50 Oral Rat: 1823 mg/kg
 LD50 Skin Rat: >5000 mg/kg
 LC50 Inhalation Rat: >0.27 - <1.17 mg/L/4 hr.

Sodium acid acetate:

LD50 Oral Rat: >5000 mg/kg
 LD50 Skin Rat: >5000 mg/kg

Carbonic acid disodium salt:

LD50 Oral Rat: 2800 mg/kg
 LD50 Skin Rabbit >2000 mg/kg
 LC50 Inhalation Guinea pig: 0.8 mg/L/2 hr.

Sodium Sulfate: Not acutely toxic

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Sodium Chloride: Not acutely toxic

Skin corrosion / irritation: Dermal exposures along with moisture may cause redness, irritation, burning sensation, swelling, blister formation, first, second, or third degree burns. Repeated and prolonged skin contact may cause a dermatitis.

Serious eye damage / irritation: Causes serious eye damage. Exposure to eyes may cause irritation and burns to the eye lids, conjunctivitis, corneal edema, and corneal burn. Significant and prolonged contact may cause damage to the internal contents of the eye.

Inhalation: Fatal if inhaled. Inhalation of dust may cause irritation of upper and lower airways, coughing, laryngeospasm and edema, shortness of breath, bronchoconstriction, and possible pulmonary edema. The pulmonary edema may develop several hours after a severe acute exposure.

Ingestion: Exposure by ingestion may cause irritation, nausea, and vomiting. May cause local tissue damage to esophagus and stomach such as burning, inflammation, local ulceration, and may cause gastrointestinal bleeding.

Respiratory or skin sensitization: Product does not contain skin or respiratory sensitizers.

Germ cell mutagenicity: No data available

Carcinogenicity: None of the other components at 0.1% or greater are listed as a carcinogen or potential carcinogen by IARC, or EU CLP.

Reproductive Toxicity: No adverse effects on reproduction are known.

Specific Target Organ Toxicity:

Single Exposure: None expected

Repeat Exposure: None expected

Aspiration: Not an aspiration hazard.

12. Ecological Information

12.1 Aquatic Toxicity: Very toxic to aquatic life.

Solid HOCL Blend:

LC50: Oncorhynchus mykiss 0.13-0.36 mg/L/96 hr.

EC50: Daphnia magna: 0.196 mg/L/48 hr.

Sodium acid acetate:

LC50: Fish > 5,000 mg/L/ 96 hr.

EC50: Aquatic Invertebrates > 50 mg /L/48 hr.

Carbonic acid disodium salt:

LC50: Bluegill fish 320 mg/L/96 hr.

EC50: Daphnia magna: 265 mg/L/48 hr

Sodium Sulfate: Non-hazardous to the aquatic environment.

Sodium Chloride: Non-hazardous to the aquatic environment.

12.2 Persistence and Degradability:

Solid HOCL Blend: This material is believed not to persist in the environment. Free available chlorine is rapidly consumed by reaction with organic and inorganic materials to produce chloride ion. The stable degradation products are chloride ion and cyanuric acid.

12.3 Bioaccumulative Potential:

Solid HOCL Blend: This material hydrolyses in water liberating free available chlorine and cyanuric acid. These products are not bioaccumulative.

12.4 Mobility in Soil: No data for product.

12.5 Results of PBT and vPvB Assessment: Components do not meet requirements for assessment.

12.6 Other Adverse Effects: None known.

13. Disposal Considerations

13.1 Waste Treatment Methods: Dispose of contents/container in accordance with all local and national regulations.

14. Transport Information

	14.1 UN Number	14.2 UN Proper Shipping Name	14.3 Hazard Class(s)	14.4 Packing Group	14.5 Environmental Hazards
EU ADR/RID	UN3077	Environmentally Hazardous Substances solid, n.o.s. (HOCL Blend)	9	III	Marine Pollutant
IMDG	UN3077	Environmentally Hazardous Substances solid, n.o.s. (HOCL Blend)	9	III	Marine Pollutant
IATA/ICAO	UN3077	Environmentally Hazardous Substances solid, n.o.s. (HOCL Blend)	9	III	Marine Pollutant

14.6 Special Precautions for User: Not applicable

14.7 Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

15. Regulatory Information

15.1 Safety, Health and Environment Regulations/Legislation Specific for the Substance or Mixture:

INTERNATIONAL INVENTORIES

EU Chemical Inventory (EINECS): All components are listed.

15.2 Chemical Safety Assessment: Does not meet requirements.

16. Other Information

GHS Phrases for Reference (See Section 2 and 3):

Aqua. Acute Tox. 1 – Hazardous to the Aquatic Environment: Acute Hazard Category 1
Aqua. Chronic Tox. 1 - Hazardous to the Aquatic Environment: Chronic Hazard Category 1
Eye Irrit. 2 – Eye Irritation Category 2
Inhal. Tox. 2 – Acute Toxicity (Inhalation) Category 2
Oral Tox. 4 – Acute Toxicity (Oral) Category 2
Ox. Sol. 2 – Oxidizing Solid Category 2
Skin Cor. 1A - Skin Corrosive Category 1A
STOT SE 3 – Specific Target Organ Toxicity Single Exposure Category 3

H272 May intensify fire: oxidizer.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.

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H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H335 May cause respiratory irritation.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

DATE OF CURRENT REVISION: 31 August 2016

REVISION SUMMARY: New EU GHS SDS.

DATE OF PREVIOUS REVISION: N/A

General Disclaimer:

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